ABSTRACT OF THE DISCLOSURE

An exhaust emission control apparatus for an internal combustion engine is capable of suppressing a nasty smell due to the hydrogen sulfide generated upon recovery from SOx poisoning. The exhaust emission control apparatus includes an NOx storage-reduction catalyst, a reducing agent supplying section for supplying a reducing agent to the NOx catalyst, an SOx poisoning recovering section for recovering the NOx catalyst from its SOx poisoning by varying the oxygen concentration of an exhaust by means of reducing agent supplying section, a hydrogen sulfide concentration estimating section for estimating a concentration of hydrogen sulfide in an atmosphere into which the hydrogen sulfide is discharged, and an estimated concentration derived reducing agent supply amount control section for decreasing an amount of reducing agent to be supplied in accordance with the increasing concentration of hydrogen sulfide estimated by the hydrogen sulfide concentration estimating section while the NOx catalyst is recovered from the sulfur oxide poisoning.